

IMPROVE SAFETY AND DRIVE EFFICIENCY WITH INDUSTRY'S BEST SERVO GAUGE



Enraf Smart Servo 954

Honeywell



THE MODERN ART OF TANK GAUGING

To monitor and manage physical inventories, terminal operators need precise gain/loss calculations, as well as reliable tank gauging and inventory management systems.

Fierce competition means margins are squeezed, while operators face stringent safety, environmental and measurement legislation. Tank gauging is central to meeting these challenges.

An accurate assessment of tank contents helps terminals run profitably and reliably. It not only keeps everyone safe, but is crucial for satisfying stakeholders and supporting decisions to improve performance and drive down costs.



PARTNER WITH AN INDUSTRY LEADER

Honeywell Enraf pioneered tank gauging when we developed automatic servo level gauging technology in the 1950s, and soon after introduced the first automatic level system for bulk liquid storage tanks.

Today, our systems combine the latest technology with proven measurement concepts for an unrivaled solution to help terminals across the world create safer, more reliable and more efficient operations.

With more than 500 years of combined in-house engineering experience, and over eight million hours of engineering and support delivered, our expertise ensures equipment is implemented right – the first time – for a faster startup and improved performance.

SUCCESSFUL INSTALLATIONS WORLDWIDE

More than 100,000 Honeywell Enraf tank gauges are currently in operation around the world. An extensive global network of engineering, service and support specialists stands behind these installations.

Serving Greenfield and Brownfield Customers

Honeywell Enraf solutions are totally integrated and scalable, so whether you are building a new facility, or expanding or upgrading an existing one, we can help reduce overall project risk, accelerate production schedules and improve your business outcomes through solutions that drive safety, reliability and efficiency without unnecessary downtime.

Proven Approach to Level Measurement

Honeywell Enraf servo gauging combines the latest technology with proven measurement techniques for an unrivalled tank gauging solution. Focused on accuracy, ease of use and integration, our systems help you stay compliant, meet custody transfer requirements, and manage inventory for an efficient and safe operation.

Cost-effective and Dependable

Our portfolio of advanced servo tank gauges offers rugged, and modular construction, resulting in very low maintenance and a longer life.

Versatile and Reliable

We offer servo gauges that are suitable for both custody transfer and inventory control applications, and are designed for use in Safety Integrity Level (SIL)-3 loops to prevent spillage.

WHY HONEYWELL

As a major automation supplier, Honeywell provides industry-leading measurement and control technology to process industry companies worldwide. We offer proven field instrumentation solutions, with reliable products and systems that enable customers to monitor and control their plant for optimal performance.



THE BEST TECHNOLOGY HAS IMPROVED

Honeywell Enraf automatic tank gauges are recognized as an industry standard worldwide, providing reliable level measurement with the highest accuracy available in the marketplace. These multi-functional devices integrate liquid level, density and free water interface measurements for a complete tank gauging solution.

Our automatic tank gauges have helped thousands of end-users drive down operational costs while meeting the most rigorous international standards.

INTRODUCING THE SMART SERVO 954

Honeywell Enraf has ensured that the industry's best tank gauging solution is now even better. Designed for measuring all kinds of liquids in any type of storage tank, our new Smart Servo 954 is a reliable, versatile and accurate automatic tank gauge. This instrument advances the art of tank gauging by combining proven technology with enhanced electronics and software, as well as increased intelligence. And, it stands up to the most demanding process conditions.

State-of-the-art Features

The Smart Servo 954 was designed to incorporate a host of innovative, best-in-class features. For example, its unique, fully capable software supports diagnostics on SIL-rated loops. An option slot for additional features allows the connection of temperature measuring elements for spot/average product and vapor phase temperature, as well as product temperature profiles.

The new gauge is equipped with a Servo Auto Test feature, which increases safety, integrity and diagnostic coverage, and enables usage in overfill protection loops. It can be included in SIL-2 safety loops, and if used in a redundant configuration, is suitable for SIL-3-rated loops.

Lowest Cost of Ownership

The Smart Servo 954 delivers the industry's lowest cost of ownership due to its simple installation and commissioning, and improved capabilities for asset utilization.

Ease of Upgrade or Migration

In addition to installing the new smart servo gauge on Greenfield projects, customers can replace existing gauges with state-of-the-art servo technology, or migrate existing equipment to the latest measurement system.

The innovative Design of the Smart Servo 954 incorporates:

- Patented algorithms for greater precision in all applications
- Adaptive dynamic compensations to improve measurement under adverse conditions
- Patented force transducer technology to optimize stable operation
- Advanced drum calibration for guaranteed accuracy
- "SIL-by-design" features with unique diagnostics for reliable operation (IEC 61508)
- Separate terminal compartment for ease of wiring
- Safety approvals and certifications from legal metrology institutes worldwide
 - NMI approvals
 - OIML R85 and API 3.1B compliance



A Flexible and Adaptable Solution

Honeywell Enraf servo gauging systems provide a flexible and adaptable solution for a wide range of terminal operations. They are suitable for:

- Product level
- Interface level
- Product and gas temperature with spot or average temperature measurement, or temperature profiling
- Density measurement and profiling
- Direct water bottom measurement or via capacitive probes
- Average continuous density monitoring connecting one or more HART pressure transmitters
- TUV SIL Certified programmable NO/NC alarm relay contact and/or 4-20 mA output for direct connection to a Distributed Control System (DCS), or safety and overfill protection systems such as Honeywell Safety Manager
- Measurement ranges up to 150 m
- Working pressure up to 40 bar

Benefits to Your Bottom Line

Honeywell Enraf Smart Servo 954 is the most reliable, versatile and accurate automatic tank gauge available. Users of third-party radar level gauges can install this highly accurate and reliable instrument without replacing their existing wiring or other infrastructure.

Specific Benefits to End-users Include:

- Improve reliability under dynamic conditions
- Enhanced safety with SIL by design and SIL certified AO/DO options
- Easy, trouble free installation
- Modular design for ease of maintenance
- Simple migrations for Legacy Enraf Servo's and 3rd party Servo's to advanced servo technology

POWERFUL FUNCTIONALITY FOR DEMANDING APPLICATIONS

Liquid tank gauging is an important function at diverse process industry sites. It has a major impact on performance, reliability and safety in fields like oil and gas, refining, and chemicals/petrochemicals, among others.

In crucial operating environments, end-users need accurate level measurement solutions for applications such as:

- Precision measurement
- Custody transfer
- Inventory monitoring
- Overfill protection



THERE ARE NUMEROUS REASONS TO CHOOSE HONEYWELL



For more information

To learn more about Honeywell's Enraf product ranges, visit www.honeywellenraf.com or contact your Honeywell account manager.

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Unrivalled Expertise

You can have confidence in systems and services backed by six decades in the terminal/tank gauging market.

Global Experience, Locally Applied

As a valued partner of Honeywell, you can call on 2,700 certified global project managers.

Unsurpassed Ease-of-use

Honeywell systems are designed with the end-user in mind, and are simple to install, use and maintain.

Proven Technology

Honeywell solutions feature advanced algorithms for better overall performance, adaptive dynamic compensations for stable

measurement under adverse conditions, advanced drum calibration compensation for guaranteed accuracy, and SIL-by-design capabilities with unique diagnostics for reliable operation.

Ease-of-migration

Honeywell's Enraf Servo 854 to Servo 954 migration offering provides a simple and cost-effective solution to extend life of equipment with minimal disruption to operations.

End-to-end Offering

Honeywell's comprehensive portfolio means you only need one partner for an integrated solution.

Honeywell also integrates comprehensive project execution methodologies with local resources offering expert product service and repair, as well as immediate spare parts availability. Our proactive lifecycle support services enable crucial assets like level gauges and other field devices to remain accurate and reliable while avoiding potential failures and associated downtime.

THE
FUTURE
IS
WHAT
WE
MAKE IT

Honeywell